

## HW-1

1. What is Power BI, and what are its three main components?

Power BI - is complete reporting solution. It helps to visualize data, distribution, manage the data.  
Three components of Power BI are:

1. Power BI Desktop (application)
2. Power BI service (online platform)
3. Power BI Mobile (mobile app)

2. Name two business use cases for Power BI dashboards.

1. Financial Report (banks, schools, Companies)
2. Marketing Dashboard

3. How do you download and install Power BI Desktop?

1. Go to the official website of Microsoft and Download free Power BI app
2. Open the program and install It step by step
3. After installation, launch Power BI Desktop and start using it

4. What is the difference between Power BI Desktop and Power BI Service?

Power BI Desktop is an application at your local desktop and it can be used offline. Mainly used for developing and designing reports

Power BI Service is an online platform where you can create analysis and share anytime anywhere. Enables real-time data updates, sharing across teams and organizations.

5. What file extension does a Power BI project use?

.pbip

6. Explain the role of Power Query in Power BI.

7. Why would a business prefer Power BI over Excel for reporting?

To clean and transformation of the data

8. Describe one limitation of the free version of Power BI.

No support for team collaboration, version control.

9. What is a "published report" in Power BI Service?

It is a local report that is created on your desktop and published in Power BI service (online Platform) for collaboration.

10. How does Power BI Mobile enhance accessibility?

It helps users to interact, view, share and change the reports from their tablets or smartphones.

11. Compare Power BI with Tableau—pros and cons.

Power BI	VS	Tableau
Handles medium to large data		Handles very large data sets better
More affordable		More expensive
User-friendly		More flexible, but steeper to learning curve

12. Explain how Power BI integrates with Azure services.

You can connect Power BI directly to Azure SQL or Synapse to analyze big data and build reports

13. What are "gateways" in Power BI, and when are they needed?

Gateways enable secure data transfer between your local desktop sources (SQL server, Excel and etc) and Power BI Service in the cloud

14. How would you convince a company to adopt Power BI? (ROI argument)

I think for me would be because it is more affordable and user-friendly.

It also has a powerful data connectivity and transformation

15. What security features does Power BI offer for sensitive data?

Row-Level Security

Data Encryption

Data Loss Prevention Policies